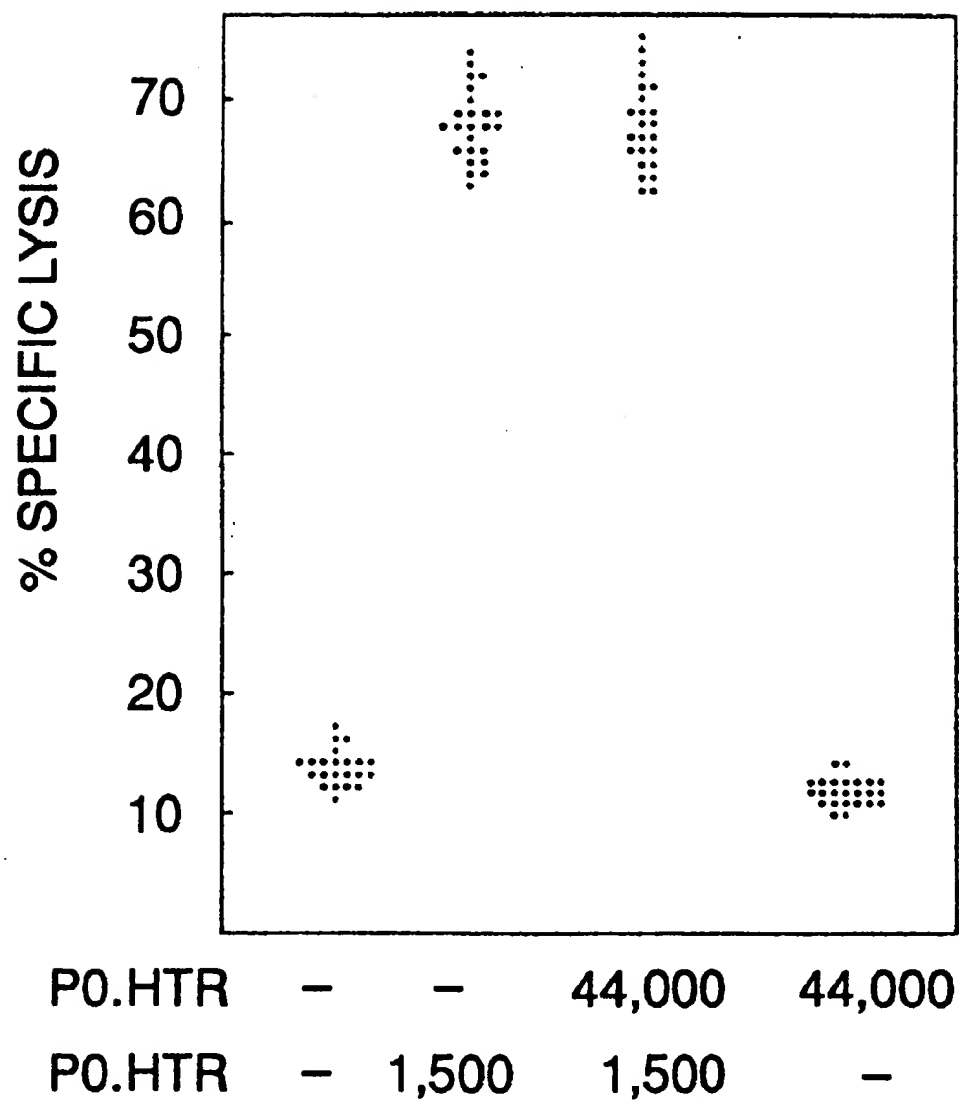


FIG. 1A



REPLACEMENT SHEET

FIG. 1B

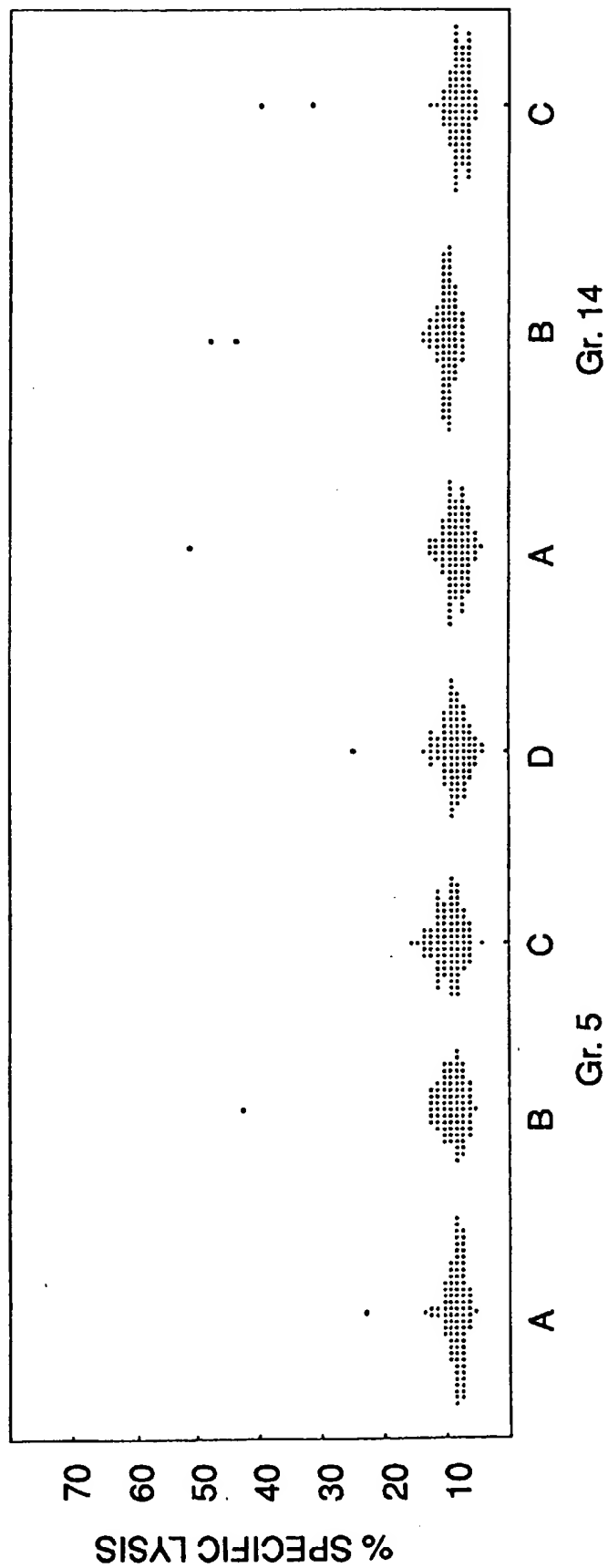
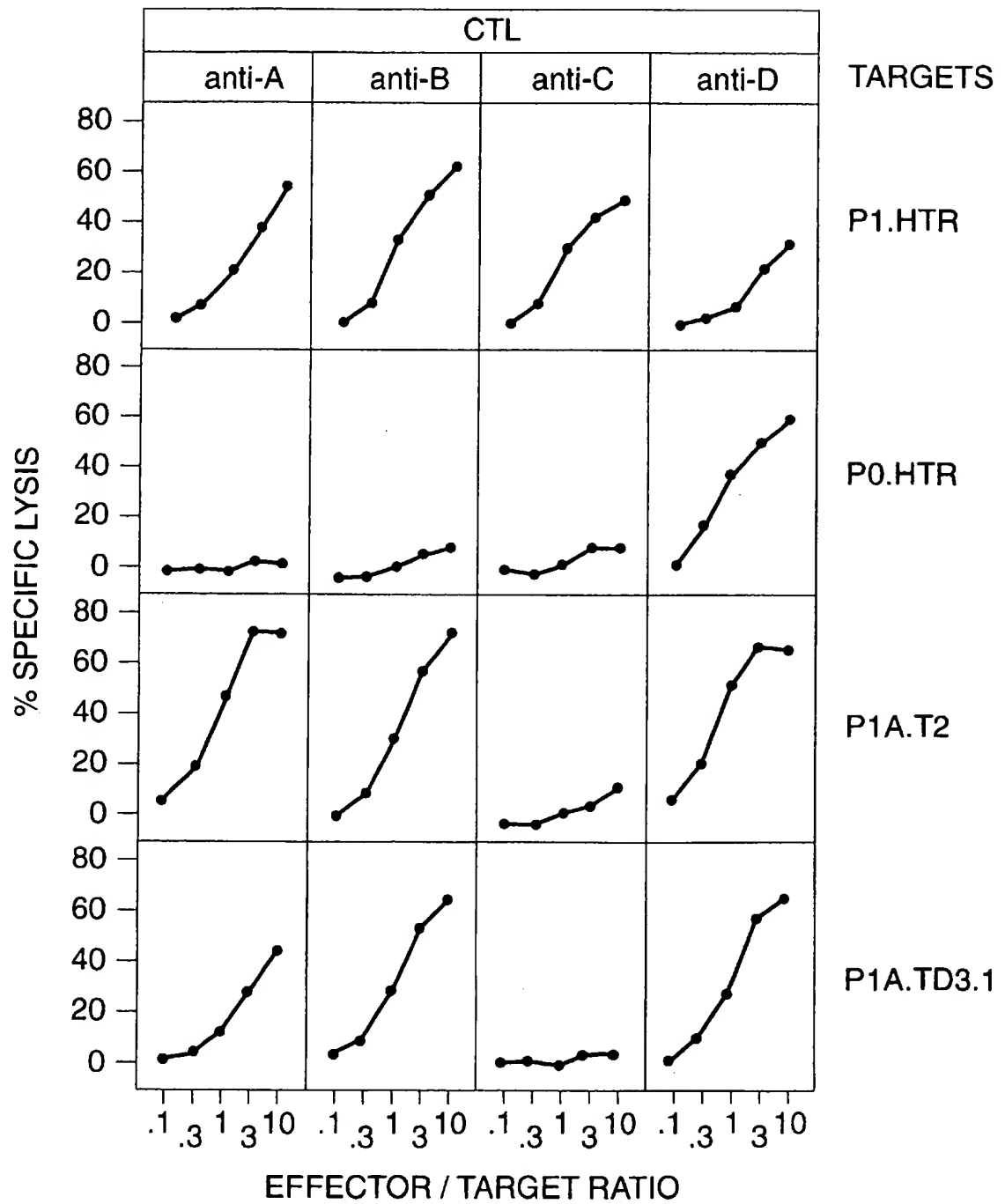
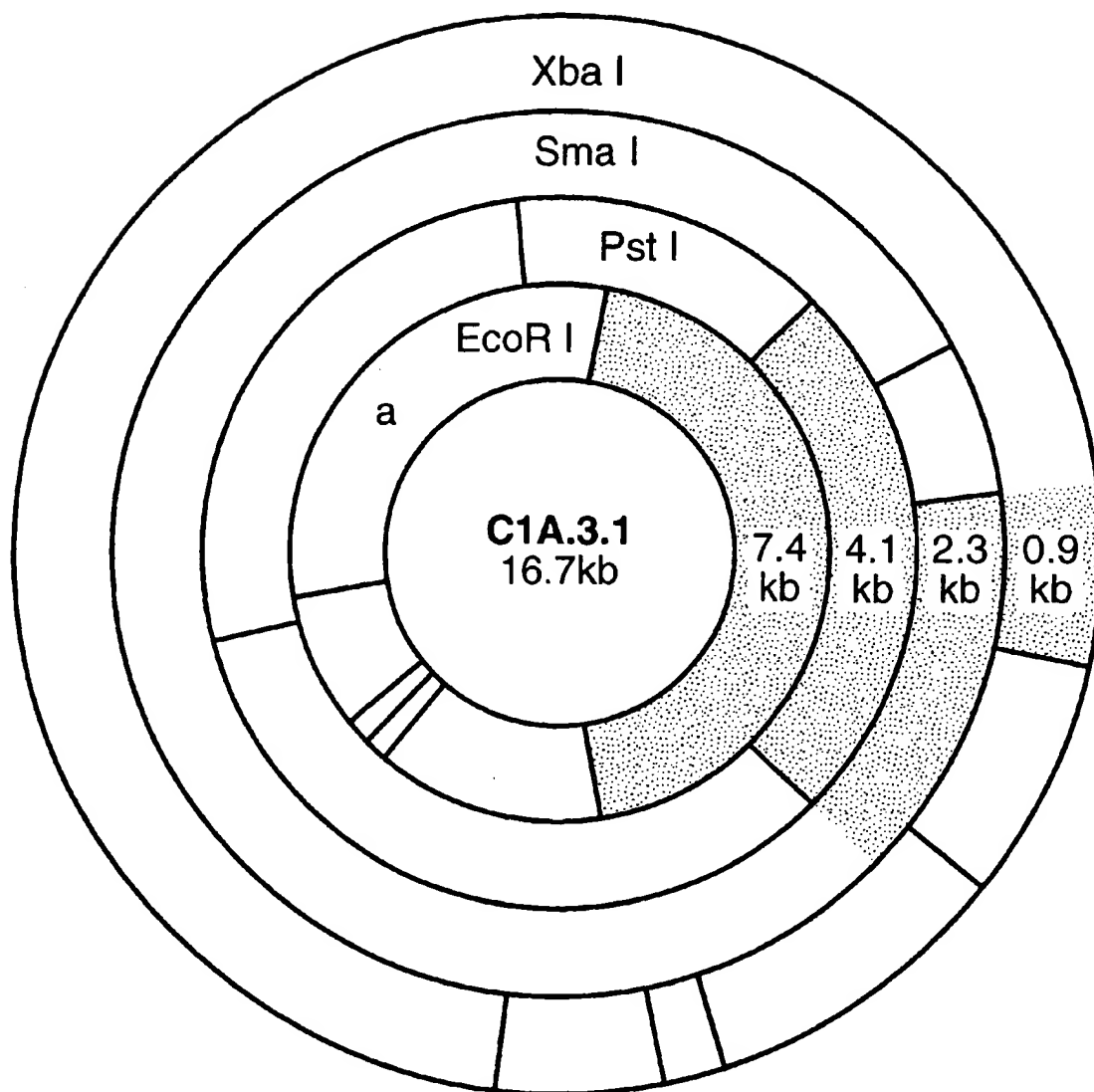


FIG. 2



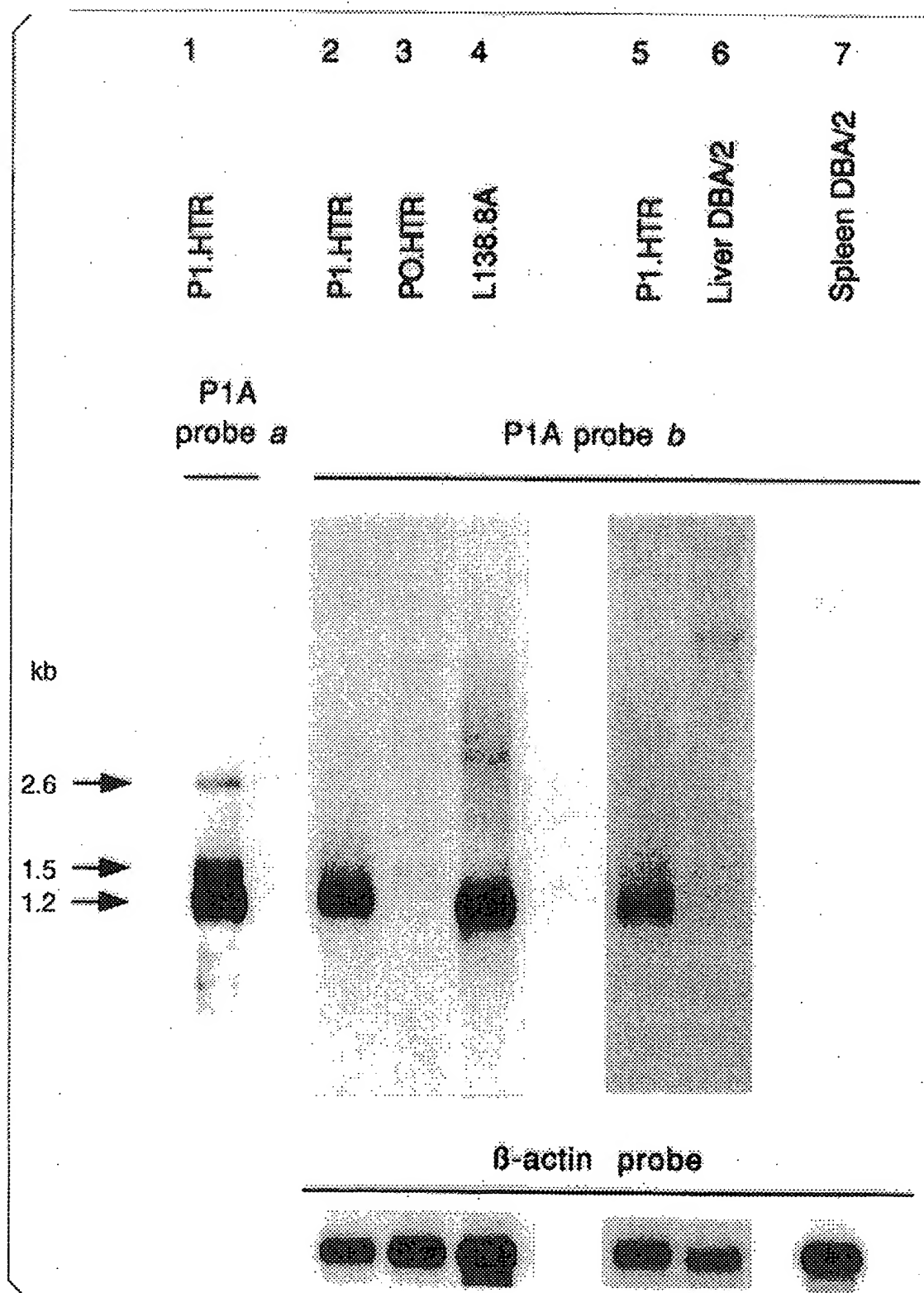
REPLACEMENT SHEET

FIG. 3



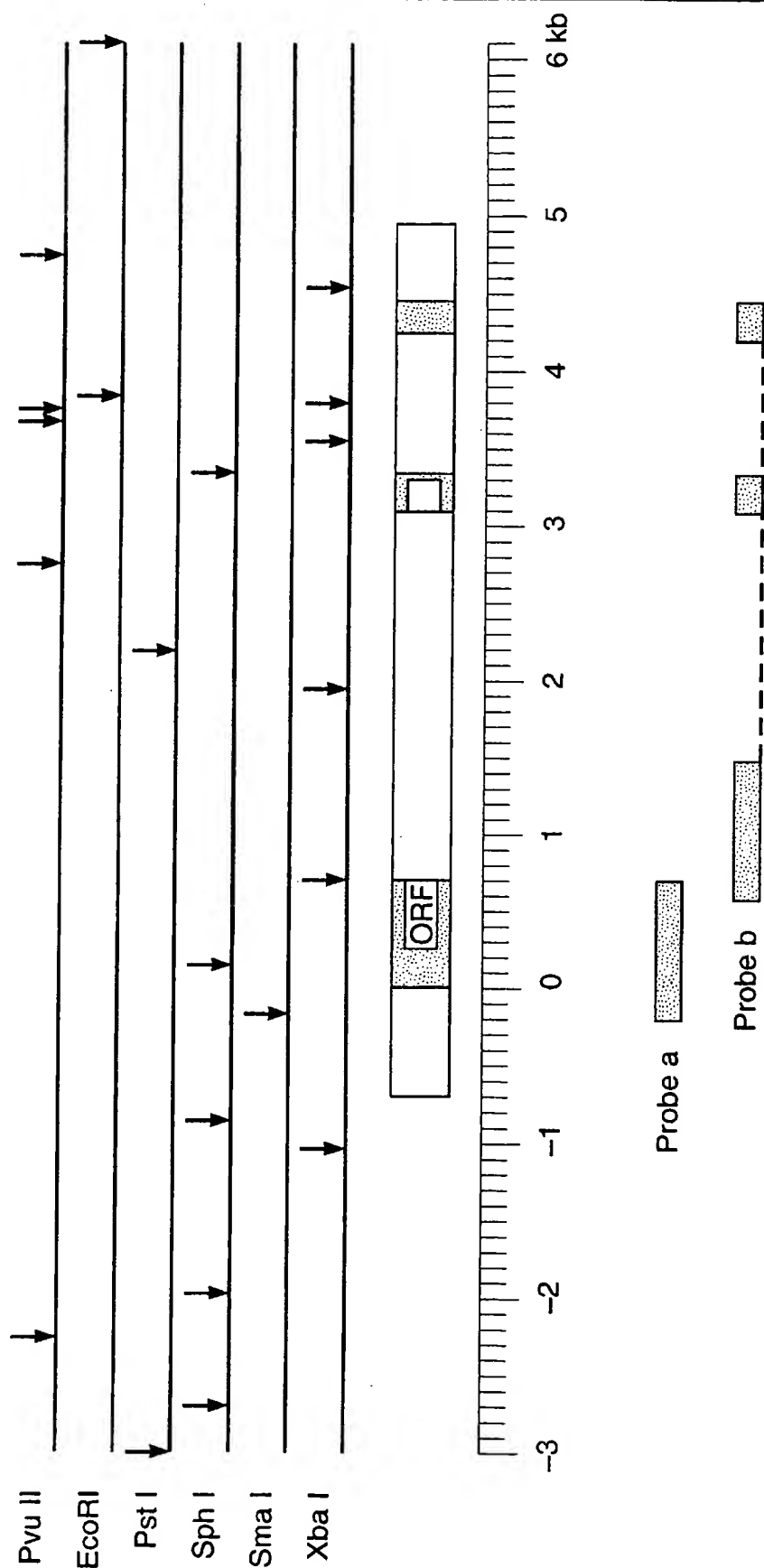
REPLACEMENT SHEET

FIG. 4



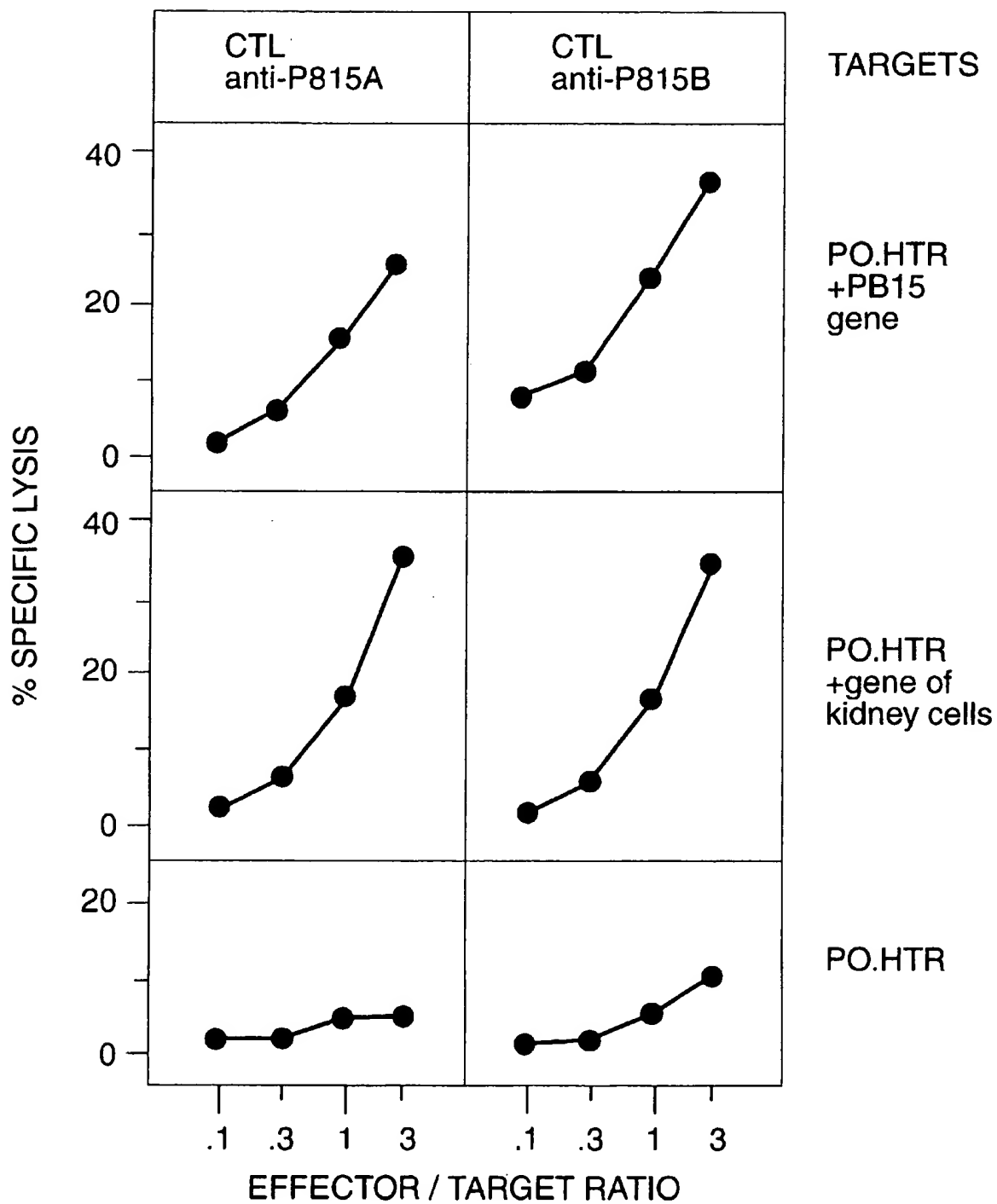
REPLACEMENT SHEET

FIG. 5



REPLACEMENT SHEET

FIG. 6



REPLACEMENT SHEET

FIG. 7

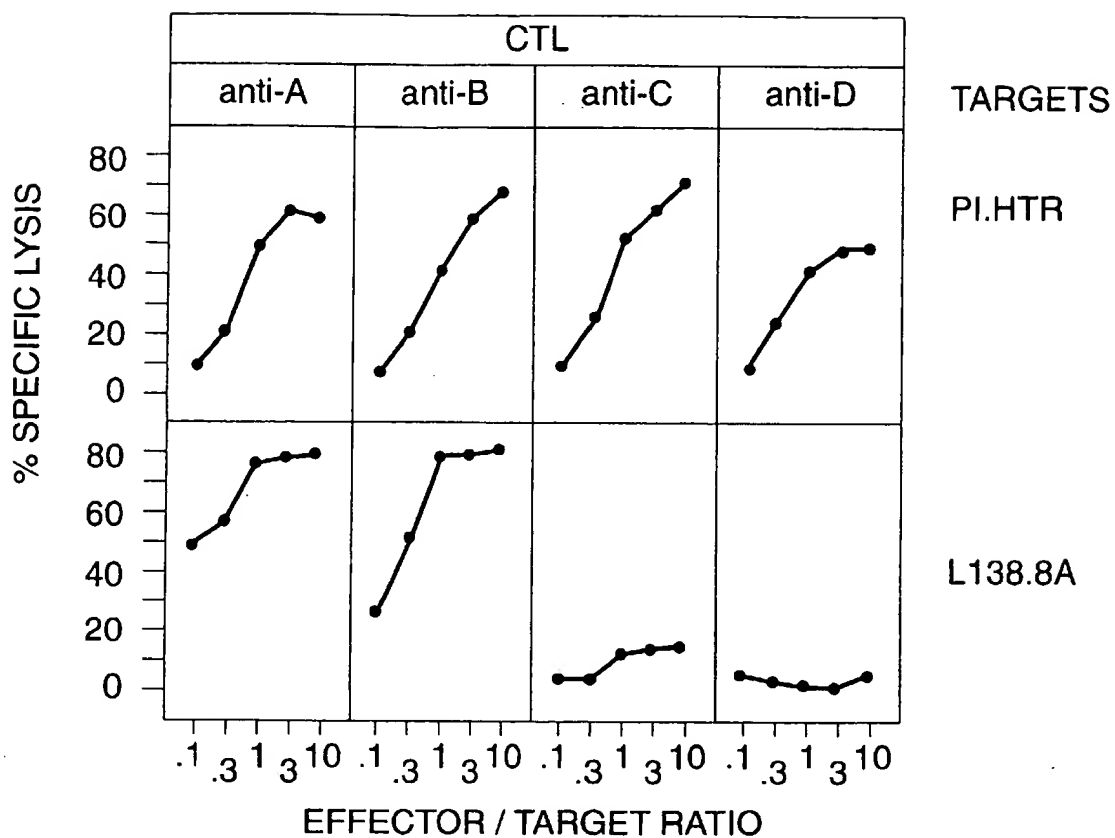
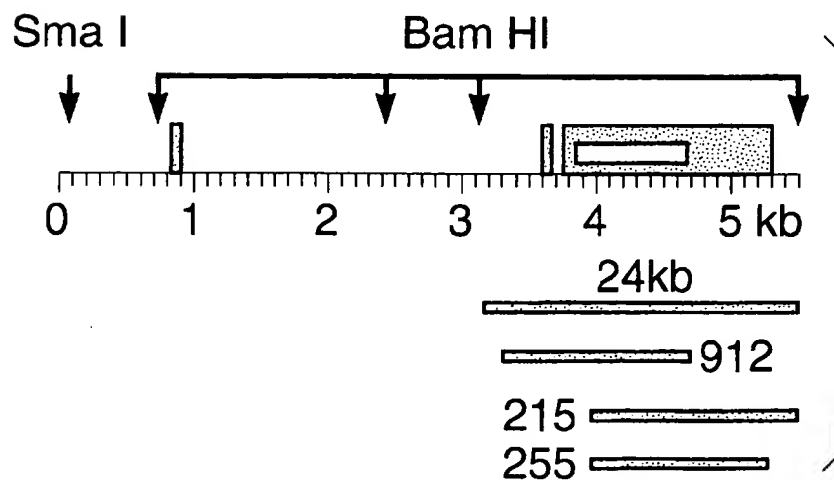


FIG. 8



REPLACEMENT SHEET

FIG. 9

MAGE-3 /// CCTCCCCAGAGTCTCTCAGGGAGCCTCCAGCCTcTcCCCACTACCATgAACTaCccCTCtctgGAGcCAAtCCTaTGAGGacTCCAGCAaCCaaGAAGAGGAGG
 MAGE-2 // CCTCCCCAcAGTCTCTCAGGGAGCCTCCAGCTTctCGACTACCATCAACTaCACCTcttTgGAGaCAAtCCgaTGAGGGcTCCAGCAaCCaaGAAGAGGAGG
 MAGE-1 / CCTCCCCAGAGTCTCTCAGGGAGCCTCCGCCtTTTCCCACTACTACCAtCACTiTCAtCTGAGAGAGGCAACCCAGTGAGGGTtTCCAGAGCCCTGAAGAGGAGG
 225 CHO-8
 /// GGCCAAGCACCTTcccTgaCC-TGGAGTCCgaGTTCaAGCAGcAcTCAGTAGGAAGGTGGCCcGAGTTGGTTcaTTTTTCTGTCTCTCAAG-TATCGAGGCCA
 // GGCCAAGaAatgTtTtcccgacCCtTGGAGTCCGAGTTCaAGCAGcAAATCAGTAGGAAGATGGTtTGAGTTGGTTcaTTTTTCTGTCTCTCAAG-TATCGAGGCCA
 / GGCCAAGCAcCTCTCTGTATCC-TGGAGTCCtTGTTCGGAGCAGTAATCACTAAAGAGGTGGCTGATtTtGGTtTGGTtTtTCTGTCTCTCAAAATATTCGAGGCCA
 325
 /// GGGAGCCgGTCAAAAGGCAGAAATGCTGGGgAGTGTCTgTCg9AAATtTg9cAGtAAtTtctTTTCTCTGTgATCTTcaGCAAAAGCtTCCagTTCCTTTCAGCT
 // GGGAGCCgGTCAAAAGGCAGAAATGCTGGAGAGTGTCTcTCAGAAATtTgCcAGgACTtctTTTCCcGtGATCTTcaGCAAAAGCCTCcGAGTactTTCAGCT
 / GGGAGCCAGTCAAAAGGCAGAAATGCTGGAGAGTGTCTATCAAAATtTACAAAGCACTGTtTtTCTCTGAGATCTTTCGGCAAAAGCCtCTGAGTCCtTTCAGCT
 425 SEQ-4
 /// GGTCTTTTGGCATcGAgcTGAtGGAAgTgGACCCCAcTcGGCCACtTtGTaCTtTgCcCACCTGCCCTgGGcCTCTCTTAcGATGGCCCTGCTGGGTGAcAAT
 // GGTCTTTTGGCATcGAgGTGgtGGAAgTgTcCCCCAtCaGCCACTtGTaCTCCTTGTCACTGCCCTgGGcCTCTCTTAcGATGGCCCTGCTGGGcGAcAAT
 / GGTCTTTTGGCATTGACGTGAAGGAAGCAgACCCcACCCGGCCACtCTCTATGTCTCTTCTACCTGCCtTAGGTCTCTCTCTATGATGGCCCTGCTGGGTGATAAT
 525
 /// CAGATCATGCCCCAAGgCAGGCCcTCTGTGATAATcGTCTGGcCATAATcGCAAgagAGGGCGGAcTgTGCcCTTGAGGAGaAAATCTGGGAGGAGCTGAGTG
 // CAGgTCATGCCCCAAGACAGGCCcTCTGTGATAATcGTC-TGGcCATAATcGCCAATaGAGGGCGGAcTgTGCcCTTGAGGAGaAAATCTGGGAGGAGCTGAGTa
 / CAGATCATGCCCCAAGACAGGCCtTCTGTGATAATtGTCTCTGGTcATGATtGCAATGGAGGGCGGCCATGTCTCTTGAGGAGaAAATCTGGGAGGAGCTGAGTG
 625 CHO-9

REPLACEMENT SHEET

β -action

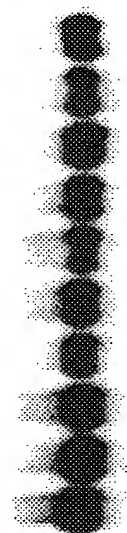
MAGE

PROBES

FIG. 10

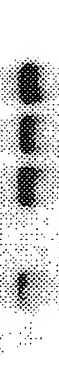


MZ2-MEL.3.0
MZ2-MEL 1982
MZ2-MEL.2.2 E-
MZ2-PBL-PHA
Lung
Kidney



MZ2-MEL 3.0
MZ2-CTL 82/30
LB34-MEL
LB17-MEL
MI665/2-MEL
LB41-MEL
MI10221-MEL
MI13443-MEL
SK23-MEL
SK33-MEL

Other
melanomas



LB4-MEL
MI4024-MEL
MZ3-MEL
MZ5-MEL
SK29-MEL
LB31-COL
LS411-COL

Other
tumors



H209-SCLC
H345-SCLC
H510-SCLC
TT

REPLACEMENT SHEET

FIG. 11A

	EXPRESSION OF MAGE GENE FAMILY					RECOGNITION BY AN1-E CTL	
	Northern blot probed with cross-reactive MAGE-1 probe*	cDNA-PCR product probed with oligonucleotide specific for:			tested by: TNF release†	Lysis§	Expression of antigen MZ2-E after transfection**
		MAGE-1	MAGE-2	MAGE-3†			
Cells of patient MZ2	melanoma cell line MZ2-MEL.3.0	+++	+++	+++	+	+	
	tumor sample MZ2 (1982)	+++	+++	+++			
	antigen-loss variant MZ2-MEL.2.2	-	+++	+++	-	-	
	CTL clone MZ2-CTL.82/30	-	-	-			
	PHA-activated blood lymphocytes	-	-	-			
Normal tissues	Liver	-	-	-			
	Muscle	-	-	-			
	Skin	-	-	-			
	Lung	-	-	-			
	Brain	-	-	-			
	Kidney	-	-	-			
Melanoma cell lines of HLA-A1 patients	LB34-MEL	++	+++	+++	+	+	+
	MI665/2-MEL	-	-	-	-	-	+
	MI10221-MEL	-	++	+++	-	-	+
	MI13443-MEL	+++	+++	+++	+	+	-
	SK33-MEL	-	+++	+++	-	-	+
	SK23-MEL	-	+++	+++	-	-	

* Data obtained in the conditions of figure 5.

† Data obtained as described in figure 6.

‡ TNF release by CTL 82/30 after stimulation with the tumor cells as described in (11).

§ Lysis of 51 Cr labelled target by CTL 82/30 in the conditions of figure 1.

** Cells transfected with the 2.4 kb fragment of gene MAGE-1 were tested for their ability to stimulate TNF release by CTL 82/30

FIG. 11B

	EXPRESSION OF MAGE GENE FAMILY				RECOGNITION BY ANI-E CTL	
	Northern blot probed with cross-reactive MAGE-1 probe*	cDNA-PCR product probed with oligonucleotide specific for:			tested by: TNF release†	Lysis§
		MAGE-1	MAGE-2	MAGE-3†		
Melanoma cell lines of other patients	LB17-MEL	+	+++	+++	-	-
	LB33-MEL	+	+++	+++	-	-
	LB4-MEL	-	-	-	-	-
	LB41-MEL	-	-	-	-	-
	MI4024-MEL	+	+++	+++	-	-
	SK29-MEL	-	-	-	-	-
Melanoma tumor sample	MZ3-MEL	+	+++	+++	-	-
	MZ5-MEL	+	+++	+++	-	-
	BB5-MEL	+	+++	+++	-	-
		+	++	+++	-	-
Other tumor cell lines	small cell lung cancer H209	-	+++	+++	-	-
	small cell lung cancer H345	-	+++	+++	-	-
	small cell lung cancer H510	-	+++	+++	-	-
	small cell lung cancer LB11	+	+++	+++	-	-
	bronchial squamous cell carcinoma LB37	-	-	+++	-	-
	thyroid medullary carcinoma TT	+++	+++	+++	-	-
	colon carcinoma LB31	-	+++	+++	-	-
	colon carcinoma LS411	-	-	-	-	-
Other tumor samples	chronic myeloid leukemia LLC5	-	-	-	-	-
	acute myeloid leukemia TA	-	-	-	-	-

* Data obtained in the conditions of figure 5.

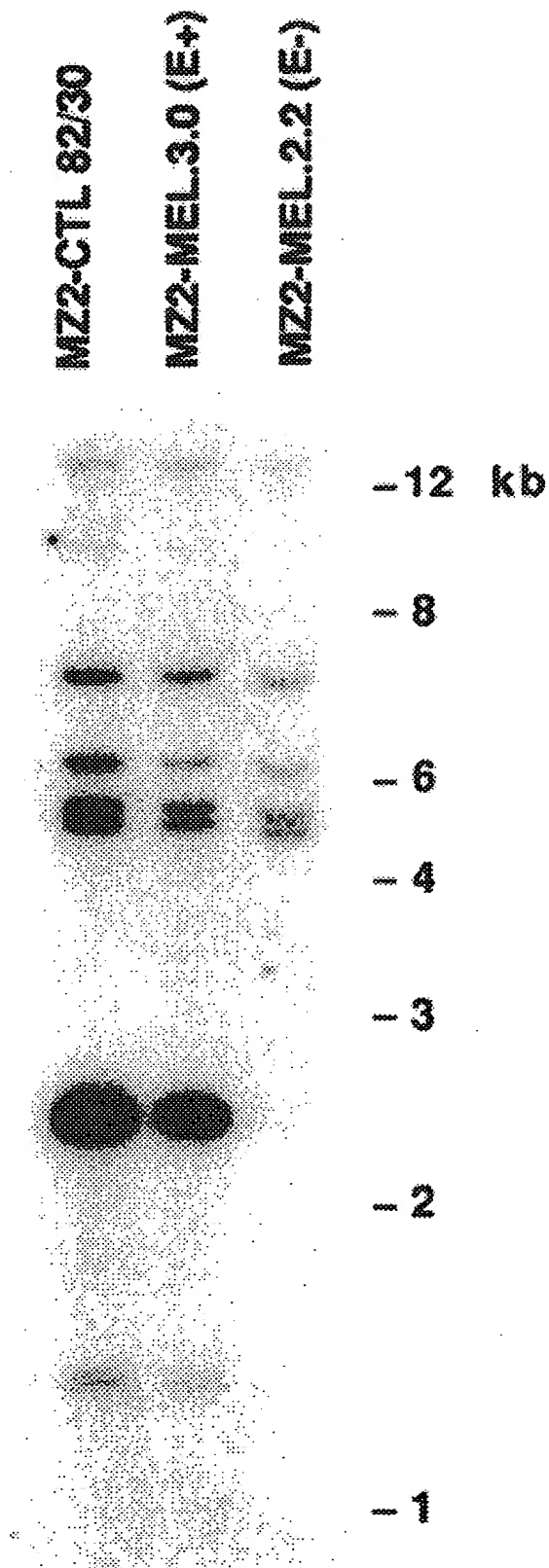
† Data obtained as described in figure 6.

‡ TNF release by CTL 82/30 after stimulation with the tumor cells as described in (11).

§ Lysis of 51 Cr labelled target by CTL 82/30 in the conditions of figure 1.

** Cells transfected with the 2.4 kb fragment of gene MAGE-1 were tested for their ability to stimulate TNF release by CTL 82/30

FIG. 12



REPLACEMENT SHEET

FIG. 13

